

REMARKS

Claims **1-20** are pending. By this amendment, claims **1, 6, and 10** are amended for the Examiner's consideration. Support for the amendments can be found at pages 10-13 of the specification. Reconsideration and timely withdrawal of the pending rejections are requested for the reasons discussed below.

35 U.S.C. § 103 Rejection

Claims **1-20** are rejected under 35 U.S.C. § 103(a) over U. S. Patent No. 5,867,110 to Naito, *et al.* ("Naito") and U.S. Patent No. 6,263,347 to Kobayashi, *et al.* ("Kobayashi"). This rejection is respectfully traversed.

A rejection under 35 U.S.C. § 103(a) requires the Examiner to establish a *prima facie* case of obviousness: "The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness." M.P.E.P. § 2142. The Court of Appeals for the Federal Circuit has set forth three elements which must be shown for *prima facie* obviousness:

In making a rejection under 35 U.S.C. §103(a), there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In this case, claims 1-20 are allowable over Naito and Kobayashi because they each recite at least one feature that the combination of Naito and Kobayashi does not teach. For example, claims 1, 6 and 10, in part, recite a host computer for holding a database in which position data of an object to be managed is stored in relation to attribute data of the object to be managed. In claim 1, the position data includes coordinate data comprising starting points "X" and "Y" and end points "X" and "Y" for each object to be managed. In claim 1, a data communication system transfers only a selected database from the host computer to the portable terminal machine so that only information about the object to be managed and surrounding environment attributes is transferred to the portable terminal. In claim 10, the database outputting unit outputs only a selected portion of the database to a portable terminal machine so that only information about the object to be managed and physical attributes of a surrounding environment is transferred to the portable terminal. Claims 1 and 6 further recite an editing tool for editing the coordinate data of a new object to be managed or when the object to be managed is moved to a new location. The portable terminal machine displays a position of the object to be managed according to the coordinate data in the database transferred from the host computer to the portable terminal machine and physical attributes of an environment surrounding the object to be managed. In claim 6, the physical attributes can be partitioned.

Naito, however, does not teach these features. In Naito, a satellite GPS system communicates position data indicative of the portable display unit's position directly to the portable display unit itself. In turn, the portable display unit automatically relays this position data to a host server. Upon receipt of the portable display unit's position data, the host server processes the position data to determine what area the portable display unit is in, and uses the

processed position data to retrieve predetermined weather, road, and emergency data from a database. Because the retrieved data is based on the portable display unit's position, it corresponds to or identifies real-time events occurring in the portable display unit's geographical area. However, Naito's system neither provides a portable terminal machine that specifies an object to be managed, among a plurality of objects to be managed, as admitted by the Examiner, nor prompts a user to specify a specific object to be managed from among the plurality of objects to be managed. Naito also does not show, for example,

1. an editing tool editing tool for editing the coordinate data of a new object to be managed or when the object to be managed is being moved to a new location;
2. a database in which position data of an object to be managed is stored in relation to attribute data of the object to be managed;
3. coordinate data comprising starting points "X" and "Y" and end points "X" and "Y" for each object to be managed;
4. a data communication system or database outputting unit which transfers or outputs, respectively, only a selected database from the host computer to the portable terminal machine so that only information about the object to be managed and surrounding environment attributes is transferred to the portable terminal; or
5. physical attributes that are partitioned.

Kobayashi does not compensate for these deficiencies of Naito. In Kobayashi, a system is provided for linking data between a computer and a portable remote terminal enabling data extracted from a personal computer into a portable remote terminal to be edited and applied freely. The system of Kobayashi describes data base definitions such as, for example, (a) Data Base Definitions DB41; (b) Item Definition DB42; (c) Relation Definition DB43; (d) User's Selection Item DB44; and (e) Object Storage DB45. Kobayashi also described an Initialization Processing, Data Editing on the Portable Remote Terminal, Synchronous Processing, and Data Display Item Editing.

However, Kobayashi is not designed to maintain or manage objects, as defined by the claimed invention. The only similarities with Kobayashi and the claimed invention is the use of a database and a remote terminal.

The Examiner is of the opinion, though, that Kobayashi discloses creating on the portable terminal an item definition database which defines record attributes, an object storage database which stores object data on a record basis correspondingly to the item definition database, a relation definition database which defines relation among object data stored in the object storage database and definition database which defines among the respective databases created (col. 5, lines 6-40.) Applicants are of the opinion that these features are not even remotely similar to the claimed invention. For example, Kobayashi shows the DB40 of the portable remote terminal 11 is composed of a data base definition DB41, an item definition DB42, a relation definition DB43, a user's selection item DB44 and an object storage DB (45a, 45b, 45c, . . . 45n). These features are merely used to create a database and allow for communication between a remote terminal and a host computer, e.g., personal computer. The objects discussed in Kobayashi, though, are

not objects to be managed in a physical space. Also, these objects are not associated or even remotely suggested in the Kobayashi reference to be modified for managing objects based on position data. The only position, even remotely suggested in Kobayashi, is that of the physical location of the objects within the database. This is obvious from a reading of Kobayashi.

As to the remaining independent claims, Applicants are of the opinion that the combination of Naito and Kobayashi does not show many of the remaining features. For example, claim 7 (and claims 19 and 20) specifically recites that position data of an object to be managed is retrieved independent of the portable terminal machine's position or user. In other words, the retrieved position data does not correspond to a location of the portable terminal machine or user, but rather corresponds to a location of an object to be managed that was specified by a user from among a plurality of objects to be managed. In contrast, Naito's system is dependent on the position of its portable display unit. For example, Naito discloses receiving the portable display unit's position data and processing that data to retrieve predetermined map, weather, and emergency data from a database connected to the host server. In Naito, it is absolutely necessary for the system to know the position of the portable terminal or display. For without this information, Naito cannot retrieve map, weather or emergency data from the database, associated with the location of the portable terminal. This is contrary to the invention of claim 7 (and claims 19 and 20), which recites that the information retrieved is independent of the location of the portable terminal (or user).

The Examiner also uses Kobayashi to disclose these features. However, Applicants submit that there is no motivation to make such a combination, and even if such combination were made, it still would not result in the claimed invention. First, Naito requires the

information to be dependent on the position of the remote terminal. No combination of references can change this aspect of the Naito invention. Clearly, by trying to make the information independent on the location of the terminal, in Naito, the system would not work in the manner described by Naito. Thus, there is a teaching away from the combination suggested by the Examiner.

Claim 13, recites, in pertinent part:

... displaying the position of the specific object to be managed in the area on the map according to the map data and the position data read from the database ...

Additionally, independent claim 17 recites, in pertinent part:

... a second process for drawing on the map a display mark of the object to be managed according to an input from a user that specifies the object to be managed from among a plurality of objects to be managed ...

However, Naito and Kobayashi do not show these features. Naito discloses receiving the portable display unit's position data and processing that data to retrieve predetermined map, weather, and emergency data from a database connected to the host server. There is no indication in Naito or Kobayashi to display the actual object on a display, e.g., a computer for example. In fact, Kobayashi does not even go as far as to disclose the use of displaying any objects to be managed, in accordance and as defined by the claimed invention. Kobayashi is directed to management of the database, itself. Naito, on the other hand, is only concerned with the display of emergency information, road conditions, etc., but does not display the location of the device on a display, much less in any coordinate system, display area or management of such

devices. Naito and Kobayashi simply are not directed to maintaining or managing devices or objects.

Also claim 8, recites:

The apparatus of claim 7, further including a data receiving unit for receiving the database.

Similarly, claim 9 recites:

The apparatus of claim 7, further including a management information display unit for displaying management information of the object to be managed according to the attribute data in the database when the searching unit identifies the match.

In contrast to claim 8, Naito does not disclose that its database is transferable, at least not between the host server and the portable display unit. Rather, the host server accesses the database, retrieves necessary information, and then transmits this retrieved information to a remote portable display unit. The claimed invention, on the other hand, transfers an entire database or a portion thereof of predetermined attribute and position information to a data receiving unit, which in one embodiment is a portable terminal machine. For this reason, claim 8 is allowable over Naito.

In contrast to claim 9, Naito does not disclose displaying management information about one of a plurality of objects to be managed according to that attribute data in the database when the searching unit identifies the match. Instead, Naito's portable terminal machine transmits its real-time position information to the host server, which processes the information to retrieve from a database predetermined information that corresponds to the position currently occupied by the portable display unit. For this reason, claim 9 is allowable over Naito.

Claim 11 recites, in pertinent part:

... a mark drawing unit for enabling a user to draw a display mark on the map displayed by the map display unit; .

a coordinate obtaining unit for obtaining coordinates of the display mark drawn by the mark drawing unit; and

a data storing unit for storing the coordinate data in the database as the position data of the display mark.

In contrast, nothing in Naito discloses that its portable terminal machine includes a mark drawing unit for enabling a user to draw a display mark on the map displayed by the map display unit. Instead, Naito teaches that the map data retrieved from a database based on a position of the portable display unit is simply displayed for the user to see. The user is not able to mark the map as recited in claim 11. The passages cited by the Examiner do not show these features.

Similar to claim 11, claim 12 recites in pertinent part:

wherein the map display unit, when the display mark is drawn by the mark drawing unit, displays a reference line created on the map in response to a fixed item in the area in which the object to be managed is positioned.

In contrast, nothing in Naito discloses this claimed feature. For example, the portable display unit disclosed by Naito does not display a reference line created on the map in response to a fixed item in the area in which the object to be managed is positioned. Instead, as disclosed at col. 9, lines 50-54, Naito's communication host apparatus refers to the retrieval key table in the database to determine the longitude and latitude ranges defining an area in which the position corresponding to the received position information data falls. However, referencing a key table to determine longitude and latitude ranges is not the same as displaying a reference line on a map as claimed. Consequently, claim 12 is allowable over Naito.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Please charge any deficiencies in fees and credit any overpayment of fees to **IBM Deposit Account 09-0457.**

Respectfully submitted,



Andrew Calderon
Reg. No. 38,093

Greenblum & Bernstein, P.L.C.
1950 Roland Clarke Place
Reston, Virginia 20191
Telephone: 703-716-1191
Facsimile: 703-716-1180